

Claims

[c1] What is claimed is:

1. A backlight unit, comprising:

A plurality of lamp tubes arranged in parallel within a housing;

a plurality of reflection plates disposed underneath each of the plurality of lamp tubes and each of the reflection plates being integrated with corresponding lamp tubes to constitute an independent lamp module cartridge, which is removable from one side of the housing; and a diffusing plate disposed over the plurality of lamp tubes and fixed on the housing, the diffusing plate being used to scattering the light generated by the plurality of lamp tubes.

[c2] 2. The backlight unit of claim 1, wherein the lamp tubes are cold cathode fluorescent lamps.

[c3] 3. The backlight unit of claim 1, further comprising an optic film disposed on the diffusing plate, and the optic film comprising a diffusing sheet, a prism sheet, and a polarization transmission/reflection sheet.

[c4] 4. The backlight unit of claim 1, wherein each of the lamp

tubes has one low-voltage end connected to a first plastic capping piece and one high-voltage end connected to a second plastic capping piece.

- [c5] 5. The backlight unit of claim 4, wherein the first plastic capping piece is embedded on a first sidewall of the housing and the second plastic capping piece is embedded on a second sidewall opposite to the first sidewall of the housing.
- [c6] 6. The backlight unit of claim 4, wherein a first connector is installed at a rear side of the first plastic capping piece and has a terminal therein to electrically connect to the low-voltage end of the lamp tube.
- [c7] 7. The backlight unit of claim 6, wherein the first connector is electrically connected to a second connector through a first wiring line, and the second connector is electrically connected to the high-voltage end of the lamp tube through a second wiring line.